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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,162	07/25/2003	Stephan Kirchmeyer	CH-7855/STA-211	2513

157 7590 06/22/2006

BAYER MATERIAL SCIENCE LLC  
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PITTSBURGH, PA 15205

EXAMINER
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RONESI, VICKEY M

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/627,162

Applicant(s)

KIRCHMEYER ET AL.

Examiner

Vickey Ronesi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. All outstanding objections and rejections, except for those given below, are withdrawn in light of applicant's amendment filed 4/25/2006.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 4/25/2006. In particular, claim 1 has been amended to recite "and combinations thereof" which necessitates a 35 USC 112(1), new matter rejection. See below. Thus, the following action is properly made final.

#### ***Claim Objections***

4. Claim 3 is objected to because of the reasons given in paragraph 2 of Office action mailed 12/20/2005. In particular, formula (1) is described with the name 3,4-dialkoxythiophene, however, formula (1) represents both 3,4-dialkoxythiophenes and 3,4-alkylenedioxythiophenes.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described

in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

It is the examiner's position that the phrase "a material selected from the group consisting of poly(3,4-alkylenedioxythiophene), poly(3,4-dialkoxythiophene) and combinations thereof" fails to satisfy the written description requirement of 35 USC 112, first paragraph since there does not appear to be a written description requirement of the phrase "and combinations thereof" in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163. Applicant has not pointed to any portion of the specification, and examiner has not found any support for this phraseology in the specification as originally filed.

#### ***Claim Rejections - 35 USC § 103***

6. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas et al (US 5,300,575, cited on IDS dated 1/26/2004) in view of Moehwald (US 4,728,399).

The rejection is adequately set forth in paragraph 4 of Office action mailed 12/20/2005 and is incorporated here by reference.

#### ***Response to Arguments***

7. Applicant's arguments filed 4/25/2006 have been fully considered but they are not persuasive. Specifically, applicant argues (A) that Jonas et al does not disclose forming a polythiophene polymer *in situ* on a metal substrate like Moehwald and therefore cannot be combined with Moehwald; (B) that Moehwald does not teach polymerizing 3,4-

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ethylenedioxythiophene monomers; and (C) that prohibited hindsight has been utilized by the examiner in setting forth the rejection

With respect to argument (A), note that while Jonas et al and Moehwald utilize different polymerization processes, each one discloses the polymerization of thiophenes in the presence of an oxidizing agent. The outstanding 103 rejection does not combine the inventions of Jonas et al and Moehwald, rather, the rejection only relies on Moehwald's teaching regarding common oxidizing agents such as peroxodisulfuric acid in thiophene and pyrrole polymerizations.

With respect to argument (B), it is the examiner's position that Moehwald is not required to specifically teach polymerizing 3,4-ethylenedioxythiophene monomers. It is sufficient that it teaches polymerizing thiophenes in the presence of peroxodisulfuric acid oxidizing agent

With respect to argument (C), given that Jonas et al teaches that its polymerization of thiophene is open to the use of any oxidizing agents that is suitable for oxidative polymerization of pyrroles and given that Moehwald teaches that such oxidizing agents include peroxyacids such as peroxodisulfuric acid which are particularly useful and further teaches that such oxidizing agents are also suitable for polymerizing thiophenes, it would have been obvious to one of ordinary skill in the art to utilize peroxodisulfuric acid as the oxidizing agent in Jonas et al, absent a showing of unexpected and surprising results with peroxodisulfuric acid. In light of the above, it is clear that the combination of Jonas et al and Moehwald is not based on hindsight but based on the disclosures and teachings of the prior art.

*Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

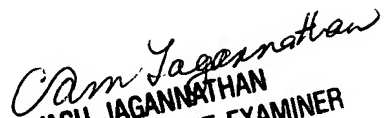
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/20/2006  
Vickey Ronesi



VASU JAGANNATHAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700